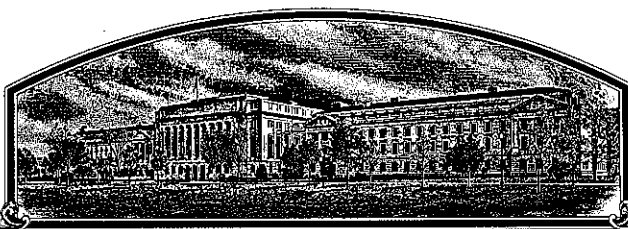


No.

9200130



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Rogers Nk Seed Co.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WATERMELON

'Juliett'

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington, D.C.
this 31st day of December in
the year of our Lord one thousand nine
hundred and ninety-two.

Attest:

Kenneth M. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Howard M. Higin
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) ROGERS NK SEED CO.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. NV 4317		3. VARIETY NAME <u>Juliett</u> To be named <u>Juliett</u> (will advise) <u>14 Dec. 1992</u>	
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) P. O. Box 4188 1755 Westgate Drive, Suite 100 Boise, ID 83711-4188		5. PHONE (include area code) (208) 322-7272		FOR OFFICIAL USE ONLY PVPO NUMBER <div style="font-size: 2em; text-align: center;">9200130</div> <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">F I L I N G</div> <div> Date <u>March 13, 1992</u> Time <input type="checkbox"/> A.M. <input type="checkbox"/> P.M. Filing and Examination Fee: <u>\$ 2150.-</u> Date <u>Feb. 10, 1992</u> Certificate Fee: <u>\$ 250.00</u> Date <u>December 7, 1992</u> </div> </div>	
6. GENUS AND SPECIES NAME Citrullis lanatus		7. FAMILY NAME (Botanical) Cucurbitaceae			
8. CROP KIND NAME (Common Name) Watermelon		9. DATE OF DETERMINATION December, 1987			
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation		11. IF INCORPORATED, GIVE STATE OF INCORPORATION DELAWARE			
12. DATE OF INCORPORATION					

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
 Mr. Jim McConnell, Rogers NK Seed Co., P. O. Box 4188, Boise, ID 83711-4188
~~Dr. Tom V. Williams, Rogers NK Seed Co., 10290 Greenway Road, Naples, FL 33961~~
~~(813) 775-4090~~

PHONE (include area code):

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

- a. ☒ Exhibit A, Origin and Breeding History of the Variety
- b. ☒ Exhibit B, Novelty Statement.
- c. ☒ Exhibit C, Objective Description of Variety
- d. ☒ Exhibit D, Additional Description of Variety.
- e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.
- f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office FEB 15, 1992
- g. ☒ Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)
☐ YES (If "YES," answer items 16 and 17 below) ☒ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☒ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act Give date _____)
☒ NO SALE OF PRODUCT FOR LIMITED FIELD TRIALS ONLY

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?
☐ YES (If "YES," give names of countries and dates)
☒ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT [Owner(s)] <u>Tom V. Williams</u>	CAPACITY OR TITLE Breeder/Manager	DATE 1-29-92
SIGNATURE OF APPLICANT [Owner(s)] <u>Jim McConnell</u>	CAPACITY OR TITLE Marketing Director	DATE 1-30-92 1

EXHIBIT A
Origin and Breeding History of the Variety
<NV 4317>

Juliett 14 Dec. 1992

NV 4317 watermelon (*Citrullis lanatus* (thunb.) Matsum and Nakai) originated as an F₁ hybrid made in October 1979 in Homestead, Florida between Jubilee Improved and Calsweet. Following this hybridization, a pedigree selection breeding scheme was followed from the F₂ through the F₉ generation.

Before the selection process, 36 seedlings of each segregating population were inoculated with Fusarium wilt, race 0 (*Fusarium oxysporum* f. sp. *niveum*) and surviving recombinants were then inoculated with Anthracnose, race 1 (*Colletotrichum lagenarium*).

The watermelon breeding program of Rogers NK was transferred to Naples, Florida in July 1986. The next planting season, F₆ generation seedlings were first inoculated with race 1 fusarium wilt and thereafter until homozygosity at F₉.

In the fall of 1987 we bulked seed from selected F₈ plants. Breeder seed of this line was increased in an insect proof cage in Naples, Florida in the Spring of 1988. Following the breeder seed increase in 1988, foundation seed was grown in an isolation cage in Yuma, Arizona that same year. Our first field increase of NV 4317 was produced in isolation near Woodland, California in 1989. Since then, two productions in northern California in 1990 and 1991 were made.

Variety trials with F₈ seed conducted in Naples, Florida and test sites in Manteca, California, Piersall, Texas, Immokalee, Florida, Cordele, Georgia, and Allendale, South Carolina in 1987 and F₉ seed in 1988 showed enough promise to warrant assigning the experimental designation NV 4317 to this line.

Continued research trials in 1989, 1990 and commercial trials in 1991 reflected NV 4317's market acceptance. This line will be named and commercialized in 1992.

NV 4317 watermelon is a stable and uniform variety. No offtypes have been observed during our testing and increase period from 1987 through 1992. If necessary, the original breeder seed can be used for further increases during the life of this variety.

EXHIBIT B
Novelty Statement for
<NV 4317>Watermelon

Jubilee 14 Dec. 1992

NV 4317 watermelon is most similar to Jubilee II but differs in average fruit weight, level of resistance to fusarium wilt, race 1 and internal flesh soluble solids. NV 4317 have fruit with an average weight of 2.2 pounds less than Jubilee II. The degree of resistance to fusarium wilt, race 1 for NV 4317 is 83% compared to 66% for Jubilee II. Soluble solids for NV 4317 is 0.8% higher, on the average, compared to Jubilee II. The differences are significant as shown in the tables below.

Table 1. Comparison of Fruit Weight

<u>Year, Season and Location</u>	<u>Average Fruit Weight (lbs.)</u>		<u>Difference</u>
	<u>Jubilee II</u>	<u>NV 4317</u>	<u>lbs.</u>
1988, Fall, Naples, FL	24.5	22.5	-2.0
1989, Spring, Leesburg, FL	22.3	21.6	-0.7
1989, Spring, Naples, FL	25.0	27.0	+2.0
1990, Spring, Allendale, SC	30.5	25.0	-5.5
1990, Spring, Naples, FL	28.0	28.0	-0.0
1991, Spring, Naples, FL	30.0	25.5	-4.5
1991, Fall, Naples, FL	25.5	24.0	-1.5
1991, Spring, Chilton, AL	19.2	14.0	-4.8
	-----	-----	-----
Average	25.6	23.4	-2.2

Average of 20 fruits/season
LSD 0.02 = 1.95 lbs. with 7 df

Table 2. Comparison of Resistance to Fusarium Wilt, Race 1

<u>Year, Season and Location</u>	<u>Average % Resistance¹</u>		<u>Difference</u>
	<u>Jubilee II</u>	<u>NV 4317</u>	
1989, Spring, Naples, FL	78	86	+12
1990, Fall, Naples, FL	61	94	+33
1991, Spring, Naples, FL	65	80	+15
1991, Fall, Naples, FL	58	72	+14
	-----	-----	-----
Average	66	83	+17

¹ Thirty-six seedlings of each variety (4 replications of 9 seedlings each) inoculated each season with 1×10^6 spores/ml.

LSD 0.01 = 9.3% with 3 df

EXHIBIT B CONTINUEDTable 3. Comparison of Soluble Solids

<u>Year, Season and Location</u>	<u>Average % Soluble Solids¹</u>		<u>Difference</u>
	<u>Jubilee II</u>	<u>NV 4317</u>	
1988, Spring, Naples, FL	11.0	13.0	+2.0
1989, Spring, Naples, FL	10.8	11.2	+0.4
1989, Spring, Leesburg, FL	10.0	10.7	+0.7
1990, Spring, Leesburg, FL	10.4	11.1	+0.7
1991, Spring, Chilton, AL	12.8	13.8	+1.0
1991, Spring, Naples, FL	11.4	10.6	+0.8
1991, Fall, Naples, FL	10.0	11.2	+1.2
	-----	-----	-----
Average	10.9	11.7	+0.8

¹ Five fruit in each of 2 replications (10 fruit total) were used for the quality sample using a hand held refractometer.

LSD 0.10 = 0.776% with 6 df

OBJECTIVE DESCRIPTION OF VARIETY
WATERMELON (CITRULLUS LANATUS)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Rogers NK Seed Co.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P. O. Box 4188

Boise, ID 83711-4188

FOR OFFICIAL USE ONLY

PVPO NUMBER

9200130

VARIETY NAME OR TEMPORARY
DESIGNATION'Jubilee II' J. L. Strachan
< NV 4317 > 14 Dec. 1992

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g., or) when number is either 99 or less or 9 or less.

1. TYPE:

 1 = OBLONG 2 = ROUND LARGE 3 = ROUND SMALL (icebox)

2. AREA OF BEST ADAPTATION:

 1 = SOUTH 2 = NORTHEAST/NORTHCENTRAL 3 = SOUTHWEST 4 = MOST AREAS

3. EMERGENCE TO ANTHESIS:

<input type="text" value="0"/> <input type="text" value="1"/>	NO. OF DAYS EARLIER THAN	<input type="text" value="1"/>	}	1 = CHARLESTON GREY
<input type="text" value="2"/> <input type="text" value="2"/>	NO. OF DAYS LATER THAN	<input type="text" value="2"/>		2 = OTHER (Specify) Jubilee II

4. POLLINATION TO MATURITY:

<input type="text" value="0"/> <input type="text" value="1"/>	NO. OF DAYS EARLIER THAN	<input type="text" value="1"/>	}	1 = CHARLESTON GREY
<input type="text" value="2"/> <input type="text" value="2"/>	NO. OF DAYS LATER THAN	<input type="text" value="2"/>		2 = OTHER (Specify) Jubilee II

5. PLOIDY:

 1 = DIPLOID 2 = TETRAPLOID 3 = TRIPLOID

6. PLANT

<input type="text" value="1"/>	Cotyledon:	1 = FLAT	2 = FOLDED	<input type="text" value="1"/>	1 = MONOECIOUS	2 = ANDROMONOECIOUS
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Number of flowers per plant at first fruit set:

<input type="text" value="8"/> <input type="text" value="4"/>	STAMINATE	<input type="text" value="1"/> <input type="text" value="2"/>	PISTILLATE	<input type="text" value="0"/> <input type="text" value="0"/>	PERFECT	<input type="text" value="6"/>	NO. OF MAIN STEMS AT CROWN
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7. STEM:

<input type="text" value="1"/>	1 = ROUND	2 = ANGULAR	<input type="text" value="0"/> <input type="text" value="9"/>	MM. DIAMETER AT SECOND NODE
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<input type="text" value="3"/>	1 = GLABROUS	2 = SCABROUS	3 = PUBESCENT	4 = BRISTLED
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<input type="text" value="2"/> <input type="text" value="4"/>	CM. VINE LENGTH ÷ NO. OF INTERNODES (At last harvest)
---------------------------------------------------------------	-------------------------------------------------------

8. LEAF:

<input type="text" value="1"/>	1 = OVATE	2 = OBOVATE	3 = ROUND	<input type="text" value="1"/>	1 = LONGER THAN WIDE	2 = LENGTH-WIDTH EQUAL	3 = WIDER THAN LONG
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<input type="text" value="1"/>	Dorsal Surface:	}	1 = SMOOTH 2 = PUBESCENT
<input type="text" value="2"/>	Ventral Surface:		

<input type="text" value="3"/>	Color:	1 = LIGHT GREEN	2 = GRAY GREEN
		3 = MEDIUM GREEN	4 = DARK GREEN

9. FLOWER (At first fruit set):

<input type="text" value="0"/> <input type="text" value="3"/>	Staminate:	CM. ACROSS	<input type="text" value="2"/>	Perfect:	CM. ACROSS	<input type="text" value="2"/>	Color:	1 = LEMON YELLOW	2 = YELLOW	3 = ORANGE
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10. MATURE FRUIT:

<input type="text" value="3"/>	1 = ROUND	2 = OVAL	3 = CYLINDRICAL	<input type="text" value="4"/>	<input type="text" value="8"/>	CM. LONG	<input type="text" value="2"/>	<input type="text" value="2"/>	CM. DIAMETER AT MIDSECTION
<input type="text" value="1"/>	<input type="text" value="1"/>	KG. AVERAGE WEIGHT		<input type="text" value="2"/>	<input type="text" value="2"/>	INDEX = LENGTH \div DIAMETER X 10			
<input type="text" value="1"/>	1 = SMOOTH		2 = SLIGHTLY GROOVED	3 = DEEPLY GROOVED					
<input type="text" value="2"/>	Color:	1 = SOLID (One color)		2 = STRIPE	3 = MOTTLE/NET				
<input type="text" value="1"/>	Primary Color:	1 = YELLOW GREEN (Desert King)		2 = LIGHT GREEN (Charleston Grey)	3 = MEDIUM GREEN (Sugar Baby)				
<input type="text" value="2"/>	Secondary Color:	4 = DARK GREEN (Florida Giant)		5 = OTHER (Specify) _____					

11. RIND:

<input type="text" value="3"/>	1 = TENDER	2 = BRITTLE	3 = TOUGH	<input type="text" value="1"/>	<input type="text" value="4"/>	THICKNESS MM. BLOSSOM END
				<input type="text" value="2"/>	<input type="text" value="2"/>	THICKNESS MM. SIDES

12. FLESH:

<input type="text" value="1"/>	1 = CRISP	2 = SOFT	<input type="text" value="2"/>	1 = COARSE-FIBROUS	2 = FINE-LITTLE FIBER			
<input type="text" value="5"/>	Color:	1 = YELLOW	2 = ORANGE	3 = PINK	4 = RED	5 = DARK RED		
<input type="text" value="11.7"/>	REFRACTOMETER % SOLUBLE SOLIDS OF JUICE (Center of fruit)			<input type="text" value="10.9"/>	% CHECK VARIETY (Specify) Jubilee II			
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	% HOLLOW HEART	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	% PLACENTAL SEPARATION	% TRANSVERSE CRACK

13. SEED:

<input type="text" value="1"/>	<input type="text" value="2"/>	MM. LONG	<input type="text" value="0"/>	<input type="text" value="6"/>	MM. WIDE	<input type="text" value="0"/>	<input type="text" value="2"/>	MM. THICK				
<input type="text" value="2"/>	<input type="text" value="0"/>	INDEX \div LENGTH \div WIDTH X 10	<input type="text" value="8"/>	<input type="text" value="5"/>	GM. PER 1000 SEED	<input type="text" value="2"/>	<input type="text" value="8"/>	<input type="text" value="6"/>	NO. SEED PER FRUIT			
<input type="text" value="0"/>	<input type="text" value="8"/>	Color:	1 = WHITE	2 = WHITE-TAN TIPPED	3 = WHITE-PINK TIPPED	4 = TAN	5 = GREEN	6 = RED	7 = DARK BROWN	8 = DARK BROWN MOTTLED	9 = BLACK	10 = MOTTLED BLACK

14. DISEASE RESISTANCE: (0 = Untested, 1 = Susceptible, 2 = Resistant)

<input type="text" value="2"/>	ANTHRACNOSE (Race 1)	<input type="text" value="0"/>	DOWNY MILDEW	<input type="text" value="2"/>	FUSARIUM WILT (Race 1)	<input type="text" value="0"/>	GUMMY STEM BLIGHT
<input type="text" value="0"/>	SQUASH MOSAIC	<input type="text" value="0"/>	WATERMELON MOSAIC	<input type="text" value="0"/>	POWDERY MILDEW	<input type="text" value="0"/>	CUCUMBER MOSAIC
<input type="text" value="0"/>	OTHER (Specify) _____						

15. OTHER RESISTANCE: (0 = Untested, 1 = Susceptible, 2 = Resistant)

<input type="text" value="0"/>	SUNBURN	<input type="text" value="0"/>	ROOT KNOT	<input type="text" value="0"/>	OTHER (Specify) _____
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16. NAME A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

Days maturity	Jubilee II	Fruit shape	Jubilee II
Plant vigor	Jubilee II	Rind color	Jubilee II
Fruit Size	Jubilee II	Flesh quality	Jubilee II

REFERENCES:

1. Frey, K. J. 1966. Plant Breeding - Symposium. 1 ed. Iowa State University Press.
2. Ware, G. W. and McCollum, J. P. 1968. Producing Vegetable Crops. Interstate Printers & Publishers, Inc. Danville, Illinois.
3. Whitaker, T. W. and Davis, G. N. 1962. Cucurbits. Interscience Publishers, Inc. New York.
4. Nickerson's or any recognized color fan should be used to determine the plant colors of the described variety.

EXHIBIT D
Additional Description for Watermelon

~~NV-4317~~ Juliette J. L. Strachan
14 December 1992

NV 4317 watermelon is a high quality, fusarium and anthracnose resistant variety. The rind is predominantly pale green with a dark green stripe. Fruits are elongate and average 23 lbs. in size. Flesh color is bright red with an average of 11.7% sugars. Seed is moderately large in size with dark brown mottled color.

EXHIBIT E
Statement of the Basis of Ownership

Juliett. J L Strachan 14 Dec. 1992

<NV 4317>watermelon is a proprietary development of Rogers NK Seed Co. This claim is based on the fact that the breeding, testing, and multiplication of the variety have been done under our supervision.

State of Delaware
Office of the Secretary of State

PAGE 1

I, WILLIAM T. QUILLEN, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT THE SAID "ROGERS NK SEED CO.", FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "ROGERS SEED CO.", THE FIFTH DAY OF MAY, A.D. 1994, AT 9 O'CLOCK A.M.



William T. Quillen

William T. Quillen, Secretary of State

0810041 8320

944080001

AUTHENTICATION: 7120759

DATE: 05-16-94

9

**CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
ROGERS NK SEED CO.**

Adopted in accordance with the provisions
of Section 242 of the General Corporation
Law of the State of Delaware

EFFECTIVE DATE: June 1, 1994

We, Willem van Overschot, President, and Richard B. Geller, Secretary, of Rogers NK Seed Co., a corporation existing under the laws of the State of Delaware, do hereby certify as follows:

FIRST: The Certificate of Incorporation of the corporation was filed on 2/27/75.

SECOND: The Certificate of Incorporation of said corporation has been amended as follows:

By striking out the whole of Article I thereof as it now exists and inserting in lieu and instead thereof, a new Article I, reading as follows:

ARTICLE I

Name

The name of the Corporation is ROGERS SEED CO.

THIRD: Such amendment has been duly adopted in accordance with the provisions of the General Corporation Law of the State of Delaware, by the unanimous written consent of all of the stockholders entitled to vote in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

FOURTH: See attached Written Consent of Sole Shareholder and Board of Directors' Resolution.

IN WITNESS WHEREOF, we have signed this certificate this 13th day of April, 1994.

Willem van Overschot
Willem van Overschot, President

Richard B. Geller
Richard B. Geller, Secretary

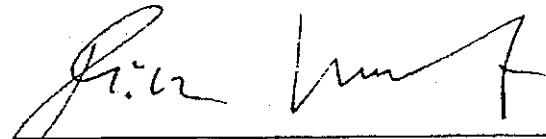
ROGERS NK SEED CO.

WRITTEN CONSENT OF SOLE SHAREHOLDER

SANDOZ CORPORATION, owner of all of the issued and outstanding shares of ROGERS NK SEED CO., hereby consents, pursuant to Section 228 of the Delaware General Corporation Law, to the adoption of the following resolution as and for the act of the shareholder:

RESOLVED, that SANDOZ CORPORATION, as sole shareholder, approves the amendment to Article I of the Certificate of Incorporation of ROGERS NK SEED CO., changing its name to **ROGERS SEED CO.**

Dated: April 22, 1994



Heinz P. Imhof,
Chief Executive Officer
Sandoz Corporation

ROGERS NK SEED CO.

RESOLUTION

RESOLVED, that according to Section 242 of the General Corporation Law of the State of Delaware, that Article I of the Certificate of Incorporation be amended, effective June 1, 1994, to read as follows: The name of the Corporation is **ROGERS SEED CO.**; and, further,

RESOLVED, that the appropriate officers of Rogers NK Seed Co. be, and they hereby are, authorized to take any and all further action and execute and deliver any and all further documents that may be necessary or desirable in order to carry out and effectuate fully the purposes set forth in the foregoing resolution.

ADOPTED UNANIMOUSLY BY THE BOARD
MARCH 31, 1994

Richard B. Geller

Richard B. Geller, Secretary

State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"ROGERS SEED CO.", A DELAWARE CORPORATION,

WITH AND INTO "NOVARTIS SEEDS, INC." UNDER THE NAME OF "NOVARTIS SEEDS, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-FIFTH DAY OF JUNE, A.D. 1997, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel

Edward J. Freel, Secretary of State

0829320 8100M
971211787

AUTHENTICATION: 8531908
06-26-97

DATE:

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 06/25/1997
971211767 - 0829320

**CERTIFICATE OF MERGER
OF
ROGERS SEED CO.
INTO
NOVARTIS SEEDS, INC.**

The undersigned corporation organized and existing under and by virtue of the General Corporation Law of Delaware,

DOES HEREBY CERTIFY:

FIRST: That the name and state of incorporation of each on the constituent corporations of the merger is as follows:

NAME

STATE OF INCORPORATION

Novartis Seeds, Inc.
Rogers Seed Co.

Delaware
Delaware

SECOND: That an Agreement and Plan of Merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of section 251 of the General Corporation Law of Delaware

THIRD: That the name of the surviving corporation is Novartis Seeds, Inc.

FOURTH: That the Certificate of Incorporation of Novartis Seeds, Inc., a Delaware corporation which will survive the merger, shall be the Certificate of Incorporation of the surviving corporation.

FIFTH: That the executed Agreement and Plan of Merger is on file at the principal place of business of the surviving corporation, the address of which is 7500 Olson Memorial Highway, Golden Valley, MN 55427.

SIXTH: That a copy of the Agreement and Plan of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.

SEVENTH: That this Certificate of Merger shall be effective on July 1, 1997.

Dated June 23, 1997

NOVARTIS SEEDS, INC.

By: Edward C. Resler
Name: Edward C. Resler
Title: Vice President & General Counsel